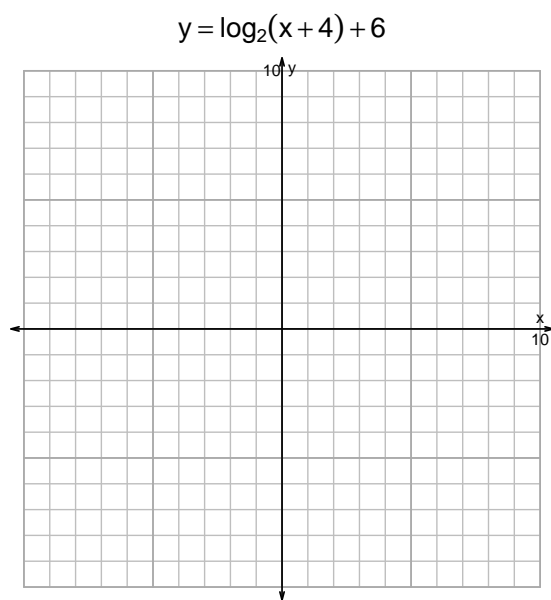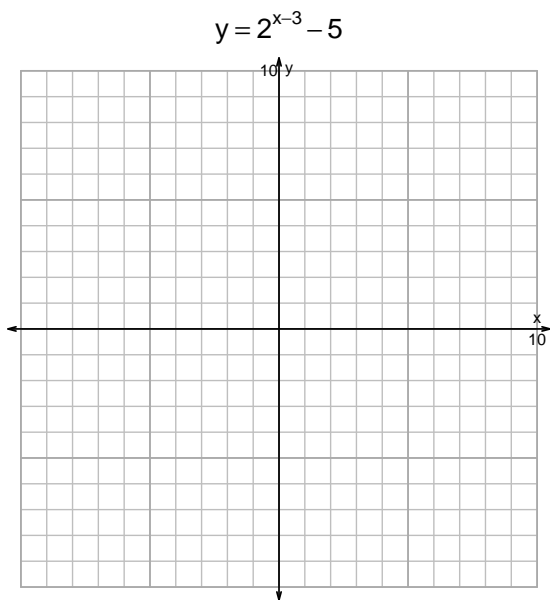Name: _____   Date: _____

s18quiz: EXP LOG (QUIZ v277)

1. Graph $y = 2^{x-3} - 5$ and $y = \log_2(x+4) + 6$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x-3} - 5$$

$$y = \log_2(x+4) + 6$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-7}{3}\right) \cdot 10^{-4t/5}$$

3. An exponential function $f(x) = 0.0938 \cdot e^{-2.28x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(0.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(70)$.